

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An apparatus for measuring ground amounts of a liquid crystal display panel, comprising:

a grinding unit for grinding upper and lower marginal portions of a unit liquid crystal display panel, wherein the unit liquid crystal display panel is formed by attaching a thin film transistor array substrate and a color filter substrate together;

a first imaging system for producing images of a ground surface of the upper marginal portion of the unit liquid crystal display panel; and

a second imaging system for producing images of a ground surface of the lower marginal portion of the unit liquid crystal display panel, wherein the upper marginal portion of the unit liquid crystal display panel is grinded more as compared to the lower marginal portion of the unit liquid crystal display panel and the first and the second imaging systems include a charge coupled device (CCD).

2. (Original) The apparatus according to claim 1, wherein the grinding unit comprises:

a grinding table upon which the unit liquid crystal display panel is loaded; and

a plurality of grinding wheels for grinding the upper and lower marginal portions of the unit liquid crystal display panel.

3. (Canceled)

4. (Original) The apparatus according to claim 1, wherein the first and second imaging systems are provided within the grinding unit.

5. (Canceled)

6. (Original) The apparatus according to claim 1, wherein the first and second imaging systems are aligned with the marginal portions of the unit liquid crystal display panel

using an alignment mark provided at the marginal portions of the unit liquid crystal display panel.

7. (Original) The apparatus according to claim 1, wherein the first and second imaging systems produce images of ground surfaces along the upper and lower marginal portions of the unit liquid crystal display panel.

8. (Original) The apparatus according to claim 1, wherein the first and second imaging systems produce images at one or more positions of the upper and lower marginal portions of the unit liquid crystal display panel.

9. (Currently Amended) A system for measuring ground amounts of a liquid crystal display panel, comprising:

an imaging system for producing images of ground upper and lower marginal portions of the liquid crystal display panel along the upper and lower marginal portions of the liquid crystal display panel respectively using the first charge coupled device (CCD) and second charge coupled device, wherein the upper marginal portion of the liquid crystal display panel is grinded more as compared to the lower marginal portion of the liquid crystal display panel.

10. (Original) The system according to claim 9, wherein the liquid crystal display panel includes a thin film transistor array substrate and a color filter substrate.

11. (Original) The system according to claim 9, wherein the imaging system is provided within a grinding unit.

12. (Canceled)

13. (Original) The system according to claim 9, wherein the imaging system is aligned with the marginal portions of the liquid crystal display panel using an alignment mark provided at the marginal portions of the liquid crystal display panel.

14. (Original) The system according to claim 9, wherein the imaging system produces images at corresponding positions of the upper and lower marginal portions of the liquid crystal display panel.

15. (Currently Amended) A method for measuring ground amounts of a liquid crystal display panel, comprising:

grinding upper and lower marginal surfaces of a unit liquid crystal display panel using a grinding unit to include a sloped edge portion, wherein the unit liquid crystal display panel includes a thin film transistor array substrate and a color filter substrate; [[and]]

producing first images of the ground surface of the upper ~~and lower~~ marginal surfaces surface of the unit liquid crystal display panel using ~~[[an]]~~ a first imaging system; and

producing second images of the ground surface of the lower marginal surface of the unit liquid crystal display panel using a second imaging system, wherein the upper marginal surface of the unit liquid crystal display panel is grinded more as compared to the lower marginal surface of the unit liquid crystal display panel.

16. (Original) The method according to claim 15, further comprising:
loading the unit liquid crystal display panel upon a grinding table of the grinding unit;
and

grinding the upper and lower marginal surfaces of the unit liquid crystal display panel using a plurality of grinding wheels.

17. (Canceled)

18. (Currently Amended) The method according to claim 15, wherein the first and second imaging system ~~is~~ systems are provided within the grinding unit.

19. (Currently Amended) The method according to claim 15, wherein the first and second imaging system ~~includes~~ systems include at least one charge coupled device (CCD).

20. (Currently Amended) The method according to claim 15, further comprising aligning the first and second imaging ~~system~~ systems with the upper and lower marginal surfaces of the unit liquid crystal display panel using an alignment mark provided at the upper and lower marginal surfaces of the unit liquid crystal display panel.

21. (Currently Amended) The method according to claim 15, wherein producing first and second images includes producing the first and second images of the ground upper and lower marginal surfaces of the unit liquid crystal display panel using the first and second imaging ~~system~~ systems.

22. (Currently Amended) The method according to claim 15, wherein producing first and second images includes producing the first and second images of the ground upper and lower marginal surfaces of the unit liquid crystal display panel at one or more positions of the upper and lower marginal surfaces of the unit liquid crystal display panel using the first and second imaging systems.

23. (Original) A liquid crystal display panel having measured ground upper and lower marginal surfaces measure using the method according to claim 15.

24. (Original) A liquid crystal display panel having measured ground upper and lower marginal surfaces measure using the apparatus according to claim 1.